U.S. ARMY CHEMICAL MATERIALS AGENCY www.cma.army.mil

CMA NEWS | August 2007

CMA PROGRESS AT A GLANCE

Anniston Chemical Activity, Ala., Anniston Chemical Agent Disposal Facility work force safely processed 22,200 VX agent-filled 155 mm projectiles and 13,864 gallons of liquid VX agent as of Aug. 20. Officials predict the project will take one year to process all of the VX projectiles.

Deseret Chemical Depot, Utah, Tooele Chemical Agent Disposal Facility safely disposed of 1,900 mustard agent-filled ton containers as of Aug. 19. Mustard operations began in August 2006.

Newport Chemical Depot, Ind., Newport Chemical Agent Disposal Facility has safely neutralized approximately 64 percent of the agent stockpile as of Aug. 20.

Pine Bluff Arsenal, Ark., Pine Bluff Chemical Agent Disposal Facility continued changeover from GB rocket processing to VX rocket processing. This includes processing secondary waste and used decontamination solution, and maintenance on the Deactivation Furnace System, Metal Parts Furnace and Heated Discharge Conveyor.

Umatilla Chemical Depot, Ore., Umatilla Chemical Agent Disposal Facility received approval from the Oregon Department of Environmental Quality for a permit modification allowing simultaneous monitoring of GB and VX. (*See story on back page for more information*)

Non-Stockpile Chemical Materiel Project's Explosive Destruction System at Pine Bluff Arsenal, Ark., destroyed approximately 65 percent of its total recovered chemical warfare munitions. Also, 177 German Traktor rockets have been separated; and, the Ton Container Decontamination Facility decontaminated 12 ton containers to the 5x level as part of a test using a thermal decontamination process. Thermal decontamination operations are scheduled to begin the first quarter of fiscal year 2008.

CMA PREVAILS IN FEDERAL COURT

Judge Denies Motion to Stop Hydrolysate Shipment

On Friday, Aug. 3, a U.S. District Court judge denied a motion by plaintiffs for a preliminary injunction to halt the shipment of Newport's caustic hydrolysate from the Newport Chemical Depot to a private, permitted hazardous waste facility in Texas.

The Army restarted hydrolysate shipments on Tuesday, Aug. 7.

Chief Judge Larry J. McKinney of the U.S. District Court for the Southern District of Indiana ruled in a 57-page written opinion that "the plaintiffs have failed to show a likelihood of success on the merits of their claims that defendants' shipment of CVXH (hydrolysate) from Newport, Indiana to Port Arthur, Texas, and subsequent incineration of the CVXH at Veolia violates NEPA, RCRA, the DAA, or Indiana and Texas RCRA-based statutes." This ruling came after a hearing held July 16 - 18, 2007.

"This decision confirms that there is no evidence to show that the harm they (the plaintiffs) are alleging is real," said Col. Jesse L. Barber, Project Manager for Chemical Stockpile Elimination. "Such a claim is unfounded and flies in the face of science ...and all our experience at other chemical demilitarization facilities."

Plaintiffs in the case included the Chemical Weapons Working Group (CWWG), the Sierra Club, Citizens against Incineration at Newport, Community In Power Development of Port Arthur, Texas and various individual citizens.

The Army entered into a contract with Veolia Environmental Services to destroy the Newport hydrolysate through use of its permitted, high-temperature incinerator. The contract, for $49 million, was signed on April 5 and the first trucks left Newport on Monday, April 16. On Monday, June 18, the Army agreed to a voluntary stay to all Newport hydrolysate shipments pending the resolution of the hearing. From April to June, 103 of the estimated 430 total shipments needed for the entire process made the 16- to 20-hour trip from Indiana to Texas without incident. Plaintiffs continue to push for the use of Super Critical Water Oxidation on site in Indiana, despite the fact the operating permit at Newport was modified earlier this decade with off-site shipment and treatment selected as the disposal method of choice based on recommendations from the National Research Council.

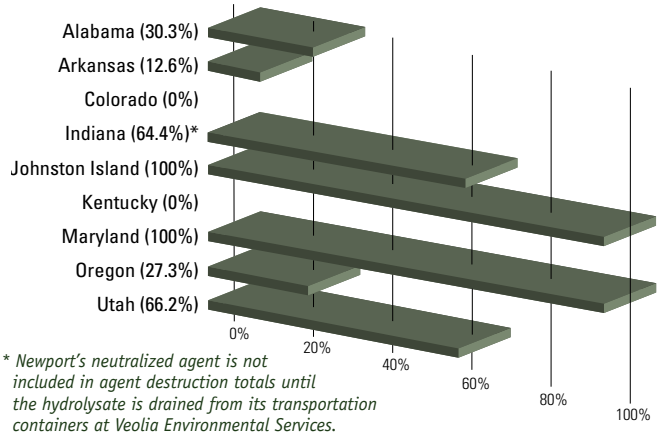
Despite the victory, the lawsuit is probably not over. The CWWG's plans to sue continue. The CWWG claims it is asking Judge McKinney to reconsider his ruling and if those efforts fail, they have identified appealing the ruling to the 7th Circuit Court of Appeals in Chicago.

"The ruling is final in our minds," Barber said. "The only reason we did not resume shipping earlier was that drivers had to be recalled and the trucks re-inspected. We have always said that what we are doing is safe, safe for our workers, our communities and our environment. That commitment remains. I don't expect any other stays in shipments — voluntary or otherwise."

CMA - CREATING A SAFER TOMORROW

45.9 PERCENT OF U.S. CHEMICAL AGENT STOCKPILE DESTROYED

(as of Aug. 21 measured by original agent tonnage since entry into force – April 29, 1997)



** Newport's neutralized agent is not included in agent destruction totals until the hydrolysate is drained from its transportation containers at Veolia Environmental Services.*

CMA NEWS August 2007

OREGON DEQ APPROVES MULTIAGENT MONITORING AT UMCDF

On Aug. 2, the Oregon Department of Environmental Quality approved the Umatilla Chemical Agent Disposal Facility (UMCDF) permit modification "Multiagent Monitoring for GB/VX Operations." This modification will allow UMCDF to process secondary waste from GB agent destruction during the site's VX elimination campaign.

The plant operating permit required UMCDF to submit a permit modification to address multiagent monitoring before the start of the VX chemical agent campaign. Because a multiagent near-real time (NRT) monitor could not be deployed in time to meet VX campaign needs, it was necessary to install an Automatic Continuous Air Monitoring System for each chemical agent being treated.

The permit modification also allows the use of Depot Area Air Monitoring Systems for monitoring both VX and GB simultaneously in areas where NRT monitoring is deemed not necessary.

To process GB-contaminated secondary waste during the VX campaign, the permit modification also removes the limitation relating to the treatment of only a single chemical agent in the Liquid Incinerators and the Metal Parts Furnace. No change was proposed for the Deactivation Furnace System (DFS) waste feed limitations because multiagent-contaminated waste is not expected to be processed in the DFS.

Also, the Agent Collection Tank System is required now to be decontaminated (triple rinsed) before changing to a new agent campaign.

TOCDF REACHES PROCESSING MILESTONE

The Tooele Chemical Agent Disposal Facility at Deseret Chemical Depot processed the 1,818th HD Ton Container in the Metal Parts Furnace on Aug. 7. That number demonstrates the maturity of both plant and technology by processing, in less than one year, more than the total number of ton containers processed at the Aberdeen Chemical Agent Disposal Facility during its nearly three years of operation.

EXPLOSIVE CONTAINMENT CHAMBER RETIRED FROM DESERET'S CAMDS

On July 18, an 82-ton Explosive Containment Chamber (ECC) was safely removed from Deseret Chemical Depot's Chemical Agent Munitions Disposal System (CAMDS) after more than 25 years of service at the former research and development facility.

The Tennessee Valley Authority (TVA), a government agency working for the U.S. Army Chemical Materials Agency's Non-Stockpile Chemical Materiel Project, planned and oversaw the ECC's removal. A 550-ton crane hoisted the 11½ foot diameter, 24½ foot long steel chamber skyward as workers carefully guided it through a rooftop opening and onto the trailer of a flatbed truck, where it was secured with chains for transport.

"You have to take it slow with a load this heavy," said Bud Salsbury, TVA/CAMDS Site Manager. "It is easy to get something like this moving, but not so easy to get it stopped if it starts to move too fast."

The ECC was a safety feature used to remove explosives from munitions which were part of research and development projects. It was removed as part of the closure activities started in June 2006. The ECC will be transported to the University of Missouri, where it will undergo modifications for eventual Homeland Defense utilization.

Workers use a 550-ton crane to carefully lift the massive steel chamber through a hole in the roof of the Explosive Test Facility.

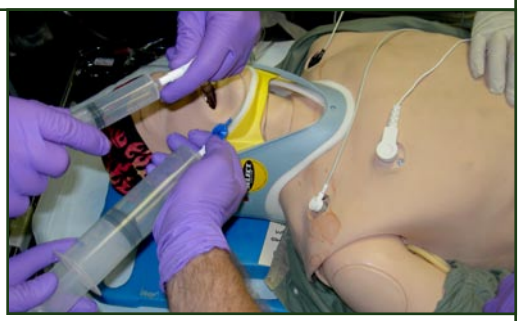
SimMan HELPS PREPARE MEDICAL RESPONSE STAFF

He has an erratic pulse, dropping blood pressure, an intravenous needle in his arm and blood oozing from his leg. Obviously badly injured, he should be moaning in pain. But he doesn't complain, although he could. He is SimMan (simulated man)—a computer-operated mannequin. SimMan is an integral part of the emergency response training U. S. Army Chemical Materials Agency (CMA) site medical staff must undergo.

SimMan provides tough, realistic training. Able to portray 25 different medical emergency scenarios that may occur at any of the depots or installations, SimMan allows trainees to practice responding to scenarios that include nerve-agent exposure, heart attacks, gun shots and strokes.

"We hope we never encounter these scenarios in real life, but they are part of the program in case we need them," said Alan Cushen, Chief, Occupational Health & Quality Assurance, "and we are developing more each year."

SimMan's seventy pounds is distributed realistically and his joints are movable. His weight provides realistic training but is light enough to avoid injuring the trainees. Speech is provided through integrated speakers, allowing SimMan to answer questions. When administered drugs, SimMan reacts appropriately. If paramedics or trainees take too long treating SimMan, he "dies" just like a real person might.



Tooele Chemical Agent Disposal Facility personnel respond to SimMan during an emergency response exercise.

"Each chemical demilitarization site has a MegaCode Kelly mannequin, but they are a couple steps behind SimMan because they can't speak and their chests do not rise with each breath," Cushen noted.

CMA medical personnel must successfully pass two classes at the Chemical Demilitarization Training Facility at the Aberdeen Proving Ground-Edgewood Area to complete their training requirements.

A recent training scenario involves a worker injured when a VX ton container falls on his leg. A team of medical personnel, including Soldiers and civilians, makes the initial assessment of any injuries that need immediate attention and transport him to a hospital, ideally within the first ten minutes. The leader, who is a doctor, is in charge of assigning tasks to the rest of the team as necessary. Teamwork is critical to the patient's survival.

"The program uses SimMan for injuries that we would typically expect within the CMA work force. SimMan gives paramedics realistic practice, preparing them for every contingency," Cushen concluded.

CMA News is produced by the U.S. Army Chemical Materials Agency Public Affairs Office.
For more information, call (410) 436-3629 or e-mail hqcmapao@apgea.army.mil.